

Amendments to the Claims:

A listing of the entire set of pending claims (including amendments to the claims, if any) is submitted herewith per 37 CFR 1.121. This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently amended) A method for encrypting a digital data stream in a transmission system that uses orthogonal codes for the modulation, ~~wherein the~~ method comprising:

~~a k^{th} transmitter constructs~~ constructing a k^{th} connection for the a k^{th} digital data stream ($d^{(k)}$) by a k^{th} transmitter,

~~for the encryption, mixing the digital data stream ($d^{(k)}$) of the transmitter is mixed~~ with a spreading code that is assigned to this k^{th} connection,

~~assigning different spreading codes ($g_1^{(k)}$, $g_2^{(k)}$... $g_H^{(k)}$) from a defined set (G_i)~~ are assigned and

~~producing through the mixing a transmission signal ($s^{(k)}$) is produced through the~~ mixing,

~~characterized in that wherein~~ the degree of encryption of the k^{th} digital data stream ($d^{(k)}$) is increased during the k^{th} connection through the an allocation of a sequence for the application of the different spreading codes ($g_1^{(k)}$, $g_2^{(k)}$... $g_H^{(k)}$) and/or a hop interval (I_{hop}) by the k^{th} transmitter.

2. (Currently amended) ~~[[A]] The method as claimed in claim 1, characterized in that a permutation function (S_i) defines~~ further comprising defining the sequence of the application of the content of a set of spreading codes (G_i) with a permutation function (S_i) by stating the position ($\{p_1, p_2 \dots p_M\}$).

3. (Currently amended) A method for encrypting a digital data stream that is to be transmitted, wherein after the a connection set-up, necessary parameters for the transmission and recovery are transmitted, ~~characterized by the steps~~ the method comprising:

~~communication of~~ communicating an encryption key (200) and thus:

~~establishment (210) of establishing a permutation function (S_i) that defines a sequence of the application of the content of a set of spreading codes,~~
~~establishment (220) of establishing a set (G_i) of spreading codes, and/or~~
~~establishment (230) of establishing a hop interval (I_{hop}),~~
wherein the last three steps mentioned ~~(210, 220, 230)~~ establishing a permutation function (S_i), the establishing a set (G_i) of spreading codes, and/or establishing a hop interval (I_{hop}) can be carried out in any order.

4. (Currently amended) A method for encrypting a digital data stream, ~~characterized by the execution of the method comprising executing a first permutation procedure (400) which contains a loop with the following steps:~~
 ~~setting (410) of an interval (n) to "1";~~
 ~~waiting (420) for the end of a predefined hop interval (I_{hop});~~
 ~~increasing (430) the interval (n) by the value 1;~~
 ~~carrying out a comparison (440) to see whether the current value of the interval (n) is greater than the total number (M) of the elements of a permutation function (S_i) which states the positions of the spreading code (g_n) of a set (G_i) of spreading codes that is to be used for encrypting the digital data stream, wherein alternatively the following takes place:~~

 if the comparison has a positive result:

~~resetting of the interval (n) to "1";.~~

 if the comparison has a negative result:

 equating the current spreading code (g_n) with the spreading code (g_{p_n}) that stands at the position (p_n) stipulated by the permutation function (S_i).

5. (Currently amended) A device ~~(1)~~ for carrying out ~~[[a]] the~~ method as claimed in claim 1, ~~characterized in that~~ wherein the device has a first code generator ~~(2)~~ that creates the respectively current spreading code (g_n).

6. (Currently amended) A method for decoding a received digital data stream that was sent encrypted, ~~characterized by the execution of the method comprising~~ executing a second permutation procedure (800) that contains a loop with the following steps including:

- setting (810) an interval (n) to "1";
- waiting (820) for the end of a predefined hop interval (I_{hop});
- increasing (830) the interval (n) by the value 1;
- carrying out a comparison (840) to see whether the current value of the interval (n) is greater than the total number (M) of the elements of a permutation function (S_i) which states the positions of the spreading code (g_n) of a set (G_i) of spreading codes that is to be used for decoding the encrypted digital data stream, wherein alternatively the following takes place:
 - if the comparison has a positive result:
 - resetting of the interval (n) to "1";
 - if the comparison has a negative result:
 - equating the current spreading code (g_n) with the spreading code (g_{p_n}) that stands at the position (p_n) stipulated by the permutation function (S_i).

7. (Currently amended) A device (3) for carrying out ~~[[a]]~~ the method as claimed in claim 6, ~~characterized in that~~ wherein the device (3) has a second code generator (4) that produces the current spreading code (g_n).

8. (Currently amended) A transmission system that uses orthogonal codes for the modulation, with a first device for encrypting a digital data stream, ~~in particular a device (1) as claimed in claim 5,~~ wherein the digital data stream ($d^{(k)}$) is mixed with a spreading code, and with a second device for decoding a digital data stream that was sent encrypted, ~~characterized by the execution of~~ wherein the second device executes a second permutation procedure (800) that contains a loop with the following steps:

- setting (810) an interval (n) to "1";
- waiting (820) for the end of a predefined hop interval (I_{hop});

increasing ~~(830)~~ the interval (n) by the value 1;

carrying out a comparison ~~(840)~~ to see whether the current value of the interval (n) is greater than the total number (M) of the elements of a permutation function (S_i) which states the positions of the spreading code (g_n) of a set (G_i) of spreading codes that is to be used for decoding the encrypted digital data stream, wherein alternatively the following takes place:

if the comparison has a positive result:

resetting of the interval (n) to "1";

if the comparison has a negative result:

equating the current spreading code (g_n) with the spreading code (g_{p_n}) that stands at the position (p_n) stipulated by the permutation function (S_i),

~~characterized in that it~~ wherein the system has means for

carrying out encryption,

carrying out decoding of a digital data stream that was transmitted encrypted.

9. (Cancelled)